

WaterSense Web Meeting Product Certification and Labeling September 15, 2008, 2:30 - 5:00 p.m. EDT

Stephanie Tanner (EPA) welcomed the participants and provided an overview of the WaterSense Program.

Joanna Kind (ERG) discussed the status of the irrigation control technology protocol and potential WaterSense draft specification.

Ms. Tanner clarified that product certification and labeling (the topic of the web meeting) occurs after a WaterSense specification has been finalized for a product. This meeting served to inform irrigation stakeholders about the third party certification and labeling process, so they are familiar with it when a WaterSense specification becomes final for their product category. Ms. Tanner continued the meeting by reviewing the proposed draft WaterSense certification and labeling scheme.

Following Ms. Tanner's presentation, five guest speakers presented information to the participants. The first four were WaterSense licensed certifying bodies (CBs) and the fifth was a small plumbing manufacturer.

John Glowacki (CSA International) discussed the benefits of third party certification. Third party certification is a powerful tool that allows clients to know that certified systems and products have undergone rigorous testing. It builds confidence and differentiates the market, as all products are subject to the same requirements. Accreditation provides the manufacturer with confidence that the CB is capable of performing third party certification. Since many accredited CBs exist, manufacturers have the option to search the market for the CB that best meets their needs.

Shahin Moinian (IAPMO R&T) discussed the testing options for manufacturers. Accredited CBs can use their own laboratories or subcontract testing to other accredited laboratories. Subcontracted, accredited laboratories must comply with standards set by the CB to perform testing. The CBs regularly assess the lab's test equipment, calibration and traceability, documentation, record keeping, and personnel competence. During the assessment, the laboratory must demonstrate performance of test protocols.

Tom Bowman (Underwriters Laboratory) discussed the experience CBs have working with small businesses. CBs offer services to all manufacturers and treat them all as equals. They do not offer expedited services to large companies. Since there are a variety of CBs, small businesses can choose which CB suits them best among the market competition.

Tom Palkon (Water Quality Association) discussed how CBs seek to bring new industries into their certification programs. Many CBs work to develop the test protocols that they use to certify products. They encourage manufacturers to become involved in this process so they feel that test protocols are fair and optimal. Since CBs are seeking to develop test protocols for new

products and are seeking help from those manufacturers, they are expanding their base to include new industries and businesses. In the long run, certification assures that products are well-performing and meet the needs of consumers and is positive for industry.

Lloyd Hathcock (Niagara Conservation, Corp.) represents a plumbing manufacturer, similar in size to many of the irrigation manufacturers. His company specializes in water efficiency products. With labeled toilets and faucet aerators already on the shelves, Mr. Hathcock discussed Niagara's experience from the certification process. In the past two years that they've been participating in the voluntary WaterSense program and have seen many benefits. Niagara is venturing into water efficiency program planning and management as a result of their experience with WaterSense. They have moved from manufacturing only plumbing products to including irrigation products in their product line. The WaterSense label has proved to be a significant marketing tool for products and services and has leveled the playing field for product performance levels. The certification process allowed Niagara to be proactive rather than reactive as they were a part of the specification development process for toilets, faucets, and showerheads. They identified new products and concepts that wouldn't have come to fruition if WaterSense were not in place. WaterSense products and services are in the front line for incentive program selection by water and energy agencies. The certification process can be short depending on how well prepared the industry is. Mr. Hathcock recommended that irrigation manufacturers learn the certification process now, allowing them to be prepared for product labeling when a specification is final.

Roy Sieber (ERG) opened the floor for questions to the five guest speakers.

A participant asked if their product had already passed in the SWAT test, would it need to be certified again for WaterSense.

Ms. Tanner responded that SWAT testing alone is not equivalent to the anticipated WaterSense certification. Because certification involves more than product testing and CIT is not an accredited laboratory of a WaterSense CB, past SWAT testing is not appropriate for use in the WaterSense program. In addition, the SWAT protocol that WaterSense will likely adopt is a new version; therefore, WaterSense will not be grandfathering any previously tested products. All products will have to be tested to the new Draft 8 protocol.

A participant noted that the certification process can take over a year sometimes and asked what the CBs suggest to achieve a 30-60 day certification process.

Mr. Bowman (Underwriters Laboratory) explained that Underwriters has a new way to handle work flow and have completely redesigned their work flow process. Most products will be certified much quicker than in the past with the new process in place.

Mr. Moinian (IAPMO R&T) added that for products which go through the iterative process (i.e., they do not have all of the necessary information available at the time of their application), the certification process can be 70+ days (for toilets and faucets). If their information is complete during the time of application, the certification process can be as quick as 5 days for these products.

Mr. Glowacki (CSA International) noted that CSA has had similar experiences to IAPMO. If manufacturers go through the iterative process, the certification process is slowed down significantly.

Ms. Tanner reiterated that third party certification is successful because the market is open for manufacturers to take their business where they feel service is best. Manufacturers can competitively choose where to spend their money and do their testing. WaterSense sets the criteria for CB's performance standards.

A participant asked if any CBs have reviewed the SWAT Draft 7 irrigation controller protocol for completeness and if any CBs could run the test.

Ms. Tanner explained that EPA has sent the CBs the existing protocol for review but it is not currently in a format that that would allow for implementation by CBs. EPA is currently conducting additional research on the repeatability of the protocol and working with SWAT to assure that the protocol is clear and understandable for other testing bodies. Since the protocol documentation package is not complete, EPA has not asked the CBs to fully evaluate the protocol at this time.

Ms. Tanner led the participants through the proposed final certification scheme. Kim Wagoner (ERG) discussed WaterSense draft Certification Scheme.

Mr. Sieber opened the floor for questions and discussion.

A participant asked if the WaterSense label would supersede the SWAT label.

Ms. Tanner replied that WaterSense label will not supersede the SWAT label. WaterSense will use the SWAT protocol as the performance test for products to earn WaterSense label. It is up to utilities to decide if they require SWAT testing or the WaterSense label for their incentive programs. WaterSense works with utilities and encourages them to promote uniformity in what they offer and set requirements to WaterSense levels, but they are not bound to that.

A participant asked for clarification regarding the process and repeated her understanding that WaterSense plans to use the SWAT protocol to develop product performance information. Then WaterSense wants to place additional criteria on smart controllers that will be required for certification, which haven't been completely determined yet (user interface features, etc.). Also as part of the labeling program, there will be a CB that oversees laboratories to make sure they are in compliance with certifying products. The CBs will oversee manufacturers to guarantee that products continue to meet WaterSense requirements. The participant asked for confirmation that the stated information was correct.

Ms. Tanner agreed that the procedures described were correct. CBs audit the manufacturing process. They conduct visits to manufacturing plants to ensure manufacturers are meeting the minimum quality standard. CBs assure that manufacturers are continuing to mass produce a quality product. Ms. Tanner reiterated that WaterSense does not want to develop test protocols. WaterSense wants the industry to develop and agree on test protocols. WaterSense will require that products meet or exceed the performance level (currently in development based on the SWAT protocol) to receive the label. The CB will determine if a product should receive the label and will assess if the product continues to meet the specification criteria over the years. Ms. Tanner explained that EPA does not receive test reports. EPA will not know if a product fails or how many times a product has been tested. EPA will know that a CB has tested X controllers and had X failures. Ms. Tanner reiterated that WaterSense is a pass/fail program, not a tiered or rating system program.

A participant asked what the passing score on the SWAT test would be.

Ms. Tanner responded that EPA would decide on the passing score during the specification development process. Once the controller study, which is currently being conducted at the University of Florida, is complete and EPA receives the final Draft 8 protocol, WaterSense will be able to discuss performance levels.

A participant asked when WaterSense would publish a specification for irrigation control technology.

Ms. Tanner explained that WaterSense is hoping to complete the current University of Florida study and issue a draft specification at the beginning of next year. Currently only one laboratory tests products using the protocol. The lab wrote the protocol and performs it. EPA needs to be sure that the final test protocol package can be implemented by all of the CBs.

A participant suggested that products be ranked instead of meeting pass/fail criteria. Then the participant asked if a product would have to be retested if a manufacturer chose to change the design of their product. He asked if the product would have to be retested even if the change would not affect test protocol scores.

Ms. Tanner explained that the manufacturer would need to write up the details of the design change and submit them to the CB. The CB would decide if that change impacted the test and if the results of the previous test would still apply. This decision would be made in conjunction with the manufacturer.

Mr. Moinian (IAPMO R&T) added that in the licensing agreement that manufacturers sign prior to product testing, they are obligated to report changes in their product as soon as the change occurs. The CB and the manufacturer will decide if the protocol covers the change or not. Mr. Moinian also responded to the participants comment on WaterSense using a ranking approach noting that a ranking system may be misconstrued as promoting a particular product. He added that accrediters may have a problem with certification based on a ranking scale.

A participant asked if manufacturers are going to have to wait for the rainfall requirements of the SWAT protocol to be achieved, or if labs are going to produce weather conditions.

Ms. Tanner responded that there will be no weather chamber testing. Manufacturers will have to wait for the protocol's weather requirements to come into effect. However, since CBs are all over the country, they may be in places where rain is more frequent than CIT in Fresno. If EPA moves forward in using the SWAT protocol, it will be because the protocol can be implemented nationwide in places with various weather patterns, and yet, produce consistent results.

A participant asked if EPA had a list of eligible CBs available for certification.

Ms. Tanner explained that EPA will develop this list as the draft specification is written. CBs will become accredited to use the specification when it becomes final. Then, a public list of accredited CBs and labs that work under each will be available. Ms. Tanner explained that first, WaterSense has to write a draft specification, publish it for public comment, incorporate comments, assure that CBs are accredited, and then issue the final specification.

Mr. Sieber introduced the certification costs for further discussion. He noted that third party certification balances a rigorous testing scheme with affordability. Mr. Sieber asked if anyone had any misconceptions about the costs and if the participants understood the benefits of the third party certification process.

A participant asked if the costs presented were for toilet certification or for other products. He noted that the highest cost he had experienced for independent testing of his controller was \$3,750.

Mr. Sieber explained that the presented costs were based on testing for high efficiency toilets and covered more than product testing. The costs shown represent the cost of full certification, including the manufacturer quality review and other elements.

A participant noted that the total cost of \$5,000-\$15,000 seemed too high.

Ms. Tanner noted that EPA tried to provide cost figures to display how much product testing can be. However, there are many things that go into these costs and these specific examples are for the plumbing industry. Since the SWAT protocol is not finished and the CBs haven't been able to look at the protocol in detail, WaterSense is not sure how much testing for irrigation controllers will be. The testing for irrigation products may be simpler than plumbing products because plumbing products have to account for many health and safety issues that irrigation products do not have. For recertification, small manufacturers may have their products tested every year or every other year (since the certification scheme requires that one model per manufacturer be checked every year). This may not be realistic and may change if it is inappropriate. Utilities want the CB to buy the product retail so they can see the representative sample in the marketplace; this also increases the cost of the test. WaterSense is looking at how often the certification scheme requires the CB to examine the manufacturer process, how often products are recertified, etc. The goal is not to make it so rigorous that no one can afford to participate, but rigorous enough so utilities will agree that there is integrity behind the label and they can trust the performance of these products over the long run.

A participant expressed concern that if manufacturers make a new product, they do not want to stock it on retail shelves just so CBs can pull one off of the retail shelf for testing. They want to get their product tested first, before it goes out retail.

Ms. Tanner explained that the initial products are not pulled off the retail shelf. Products are pulled off the shelves for recertification (i.e., when a product is tested a year or two after initial certification). This allows for post market surveillance of the marketplace. It allows the CBs to see if all products carrying the label have been adequately tested. This is to the benefit of all manufacturers.

A participant asked what "listing" meant in terms of being a portion of the certification cost.

Mr. Glowacki (CSA International) explained that certification is an ongoing process, and CBs are continuously maintaining a listing of certifications manufacturers hold. There is also a cost for maintaining the licensing agreement. The listing category includes these things. The prices listed in the presentation range high because toilets (the basis for the data in the presentation) sometimes come from the international marketplace, which makes product testing more expensive.

A participant asked when EPA would develop a specification for soil moisture sensors.

Ms. Tanner noted that EPA will include soil moisture sensors in the irrigation control technology specification after there is an industry-accepted test protocol for these products.

A participant asked if anyone could comment on the status of the SWAT irrigation control technology protocols.

Brian Vinchesi, SWAT Committee Member, stated that the Draft 8 weather-based irrigation controller protocol is complete. It is under a definition review within the Irrigation Association. The protocol should be delivered to EPA by next week. Comments on Phase 2 of the Draft 5 soil moisture sensor protocol are being addressed. A new draft will be issued for a 90 day review soon. Phase 1 of the soil moisture sensor protocol is complete.

A participant asked if there is going to be a WaterSense update the Irrigation Association show this year.

Ms. Tanner explained that WaterSense will be in the middle of our controller testing at UF and will not have an update at the meeting. She added that WaterSense will hold a general program session.

Jenna Smith (SWAT Chair) added that SWAT will discuss WaterSense at the annual SWAT Meeting.

If any participant has a question for the CBs, their contact information can be found at http://www.epa.gov/watersense/basic/cert_bodies.htm#het.